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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/530,911	Applicant(s) KIDO ET AL.
	Examiner Nnenna N. Ekpo	Art Unit 2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on ____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-28 is/are pending in the application.
 - 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) Claim(s) ____ is/are allowed.
- 6) Claim(s) 1-28 is/are rejected.
- 7) Claim(s) ____ is/are objected to.
- 8) Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 08 April 2005 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. ____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)

Paper No(s)/Mail Date 04/08/2005, 09/20/2005, 11/13/2006 & 08/16/2007.
- 4) Interview Summary (PTO-413)

Paper No(s)/Mail Date. ____.
- 5) Notice of Informal Patent Application
- 6) Other: ____

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The references listed in the Information Disclosure Statement filed on April 08, 2005, September 20, 2005, November 13, 2006 and August 16, 2007 has been considered by the examiner (see attached PTO-1449 form).

Drawings

3. The drawings are objected to because figures **15 and 16** should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet"

pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. **Claim 7** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. It is unclear what "a piece of still images that constitutes a moving pictures" mean. Still images are distinguished from a moving image. Examiner will examine the claim as best understood.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. **Claims 1-6, 8, 11-16, 18, 21, 23, 26 and 28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Briggs (U.S. Patent No. 7,219,367) in view of Zigmond et al. (U.S. Patent No. 6,571,392).

Regarding **claim 1**, Briggs discloses a broadcast data transmission/reception system that includes a transmitter (see fig 1 (200)), a first receiver (see fig 4A (401)) and a second receiver (see fig 4A (402)), and both the first and second receivers (401 and 402) trying to obtain the broadcast data (see col. 9, lines 31-52), wherein

the transmitter further transmits, at least a predetermined amount of time prior to transmitting the broadcast data, substitutive broadcast data (broadcast data) and a substitutive identifier (second type of communication data) one or more times, the substitutive broadcast data including a same content as the broadcast data, and the substitutive identifier being for identifying the substitutive broadcast data (see col. 13, lines 49-col. 14, line 42) and

the second receiver further includes (see fig 4A (402)):

a storing unit that stores data (see col. 9, lines 45-52 and fig 4A (330)), substitutive identifier (second type of communication data) (see col. 13, line 64);

a broadcast data obtaining unit operable to try to obtain the substitutive broadcast data based on the substitutive identifier specified by the identifier specifier (see col. 13, lines 7-9); and

a reproducing unit operable to reproduce, one of the broadcast data (the first tuner produces the first type of communication data) and the substitutive broadcast data (the second tuner produces the second type of communication data) if successfully obtained (see col. 9, lines 25-44).

However, Briggs fails to specifically disclose the transmitter transmitting broadcast data including time information indicating a reproduction start time.

Zigmond et al. discloses the transmitter transmitting broadcast data including time information indicating a reproduction start time (see col. 7, lines 55-67).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Briggs invention with the above mentioned limitation as taught by Zigmond et al. for the advantage of identifying when a program starts.

Regarding **claim 2**, Briggs and Zigmond et al. discloses everything claimed as applied above (*see claim 1*). Briggs discloses the broadcast data transmission/reception system, wherein

the broadcast data obtaining unit (see fig 4A (STT 300-1)) includes:
a recording medium (see col. 5, lines 66-col. 6, lines 10); and
a recording subunit operable to record, on the recording medium, whichever of the substitutive broadcast data and the broadcast data (broadcast and CA data) is obtained first (see col. 9, lines 53-62), and

the reproducing unit reproduces, whichever of the substitutive broadcast data and the broadcast data is recorded on the recording medium (see col. 9, lines 25-52 and fig 4A).

Zigmond et al. discloses the reproduction start time (see col. 7, lines 55-67).

Regarding **claim 3**, Briggs and Zigmond et al. discloses everything claimed as applied above (*see claim 2*). Briggs discloses the broadcast data transmission/reception system, wherein

each of the broadcast data and the substitutive broadcast data includes a plurality of data elements (see col. 13, lines 49-54, col. 13, lines 63-col. 14, lines 6 and fig 11 (1101 and 1103) respectively),

the broadcast data obtaining unit includes a judging subunit for judging whether the broadcast data (first type communication channel) or the substitutive broadcast data includes all the data elements, every time the broadcast data obtaining unit receives the broadcast data (first type communication channel) or the substitutive broadcast data (see col. 13, lines 49-54), and

the broadcast data obtaining unit obtains the broadcast data (first type communication channel) or the substitutive broadcast data only when a judgment result by the judging subunit is affirmative (see col. 13, lines 55-61).

Regarding **claim 4**, Briggs and Zigmond et al. discloses everything claimed as applied above (*see claim 1*). Briggs discloses the broadcast data transmission/reception system, wherein

the transmitter transmits pieces of the broadcast data, and the transmitter further transmits, at least the predetermined amount of time prior to transmitting the pieces of the broadcast data, pieces of the substitutive broadcast data respectively corresponding to the pieces of the broadcast data one or more times, each piece of the substitutive

broadcast data including a same content as a corresponding piece of the broadcast data (see col. 13, lines 55-col. 14, line 6),

the broadcast data obtaining unit tries to obtain the piece of the substitutive broadcast data based on the substitutive identifier specified by the identifier specifier (see col. 13, lines 7-9), and

the reproducing unit reproduces, one of the piece of the broadcast data and the piece of the substitutive broadcast data if successfully obtained (see col. 9, lines 25-44).

Zigmond et al. discloses reproduction start time (see col. 7, lines 55-67).

Regarding **claim 5**, Briggs and Zigmond et al. discloses everything claimed as applied above (see *claim 4*). Briggs discloses the broadcast data transmission/reception system, wherein

the broadcast data obtaining unit includes (see fig 4A (STT 300-1)):

a recording medium (see col. 5, lines 66-col. 6, line 10);

a recording and judging subunit operable to record, on the recording medium, each piece of the substitutive broadcast data if successfully obtained (see col. 9, lines 45-52), and judge whether a piece of the substitutive broadcast data having a piece of the broadcast data is recorded on the recording medium (see col. 10, lines 4-10); and

a recording control unit operable to record the piece of the broadcast data on the recording medium only when a judgment result by the recording and judging subunit is negative (see col. 6, lines 11-27, col. 13, lines 49-col. 14, line 6), and

the reproducing unit reproduces, whichever of the piece of the broadcast data and the piece of the substitutive broadcast data is recorded on the recording medium (see col. 9, lines 25-52 and fig 4A).

Zigmond et al. discloses reproduction start time (see col. 7, lines 55-67).

Regarding **claim 6**, Briggs and Zigmond et al. discloses everything claimed as applied above (see *claim 5*). Briggs discloses the second receiver (see fig 4A (402)), wherein

each of the plural pieces of the broadcast data and the plural pieces of the substitutive broadcast data includes a plurality of data elements (see col. 13, lines 49-54, col. 13, lines 63-col. 14, lines 6 and fig 11 (1101 and 1103) respectively,

the broadcast data obtaining unit includes a judging subunit for judging whether the broadcast data (first type communication channel) or the substitutive broadcast data includes all the data elements, every time the broadcast data obtaining unit receives the broadcast data (first type communication channel) or the substitutive broadcast data (see col. 13, lines 49-54), and

the broadcast data obtaining unit obtains the broadcast data (first type communication channel) or the substitutive broadcast data only when a judgment result by the judging subunit is affirmative (see col. 13, lines 55-61).

Regarding **claim 8**, Briggs discloses a broadcast data transmission/reception system that includes a transmitter (see fig 1 (200)), a first receiver (see fig 4A (401))

and a second receiver (see fig 4A (402)), and both the first and second receivers (401 and 402) trying to obtain the broadcast data (see col. 9, lines 31-52), wherein the broadcast data includes a plurality of data elements (see col. 13, lines 55-61), the transmitter further transmits, at least a predetermined amount of time prior to transmitting the broadcast data, substitutive broadcast data and a substitutive identifier one or more times, and the substitutive identifier being for identifying the substitutive broadcast data (see col. 13, lines 49-col. 14, line 43), the substitutive broadcast data including a predetermined member among the data elements (see col. 14, lines 26-33), the second receiver further includes (see fig 4A (402)):

a storing unit that stores data (see col. 9, lines 45-52 and fig 4A (330)), substitutive identifier (second type of communication data) (see col. 13, line 64); a broadcast data obtaining unit operable to try to obtain the substitutive broadcast data based on the substitutive identifier specified by the identifier specifier (see col. 13, lines 7-9); and

a reproducing unit operable to reproduce, only the broadcast data if successfully obtained, and reproduce the substitutive broadcast data in a case where the broadcast data obtaining unit has failed to obtain the broadcast data and succeeded in obtaining the substitutive broadcast data (see col. 13, lines 49-col. 14, line 6).

However, Briggs fails to specifically disclose the transmitter transmitting broadcast data including time information indicating a reproduction start time.

Zigmond et al. discloses the transmitter transmitting broadcast data including time information indicating a reproduction start time (see col. 7, lines 55-67).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Briggs invention with the above mentioned limitation as taught by Zigmund et al. for the advantage of identifying when a program starts.

Regarding **claim 11**, Briggs discloses a second receiver (see fig 4A (402)) that tries to obtain broadcast data (see col. 9, lines 45-52), a first receiver (see fig 4A (4014)) trying to obtain the broadcast data (see col. 9, lines 35-38), wherein

the second receiver further tries to obtain substitutive broadcast data and a substitutive identifier which are transmitted one or more times at least a predetermined amount of time prior to a time when the broadcast data is transmitted, the substitutive broadcast data including a same content as the broadcast data, and the substitutive identifier being for identifying the substitutive broadcast data (see col. 13, lines 62-col. 14, lines13),

the second receiver further includes (see fig 4A (402)):

a storing unit that stores data (see col. 9, lines 45-52 and fig 4A (330)), substitutive identifier (second type of communication data) (see col. 13, line 64);

a broadcast data obtaining unit operable to try to obtain the substitutive broadcast data based on the substitutive identifier specified by the identifier specifier (see col. 13, lines 7-9); and

a reproducing unit operable to reproduce, one of the broadcast data (the first tuner produces the first type of communication data) and the substitutive broadcast data

(the second tuner produces the second type of communication data) if successfully obtained (see col. 9, lines 25-44).

However, Briggs fails to specifically disclose transmitting broadcast data including time information indicating a reproduction start time.

Zigmond et al. discloses the transmitter transmitting broadcast data including time information indicating a reproduction start time (see col. 7, lines 55-67).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Briggs invention with the above mentioned limitation as taught by Zigmond et al. for the advantage of identifying when a program starts.

Regarding **claim 12**, Briggs and Zigmond et al. discloses everything claimed as applied above (see *claim 11*). Briggs discloses the broadcast data transmission/reception system, wherein

the broadcast data obtaining unit (see fig 4A (STT 300-1)) includes:
a recording medium (see col. 5, lines 66-col. 6, lines 10); and
a recording subunit operable to record, on the recording medium, whichever of the substitutive broadcast data and the broadcast data (broadcast and CA data) is obtained first (see col. 9, lines 53-62), and

the reproducing unit reproduces, whichever of the substitutive broadcast data and the broadcast data is recorded on the recording medium (see col. 9, lines 25-52 and fig 4A).

Zigmond et al. discloses the reproduction start time (see col. 7, lines 55-67).

Regarding **claim 13**, Briggs and Zigmond et al. discloses everything claimed as applied above (see *claim 12*). Briggs discloses the second receiver (see fig 4A (402)), wherein

each of the plural pieces of the broadcast data and the plural pieces of the substitutive broadcast data includes a plurality of data elements (see col. 13, lines 49-54, col. 13, lines 63-col. 14, lines 6 and fig 11 (1101 and 1103) respectively,

the broadcast data obtaining unit includes a judging subunit for judging whether the broadcast data (first type communication channel) or the substitutive broadcast data includes all the data elements, every time the broadcast data obtaining unit receives the broadcast data (first type communication channel) or the substitutive broadcast data (see col. 13, lines 49-54), and

the broadcast data obtaining unit obtains the broadcast data (first type communication channel) or the substitutive broadcast data only when a judgment result by the judging subunit is affirmative (see col. 13, lines 55-61).

Regarding **claim 14**, Briggs and Zigmond et al. discloses everything claimed as applied above (see *claim 11*). Briggs discloses the second receiver (see fig 4A (402)), wherein the second receiver receives pieces of the broadcast data, and further receives pieces of the substitutive broadcast data corresponding to the pieces of the broadcast data respectively, each piece of the substitutive broadcast data being transmitted one or

more times at least a predetermined amount of time prior to a time when the broadcast data is transmitted, and including a same content as a corresponding piece of the broadcast data of the corresponding piece of the broadcast data (see col. 13, lines 55-col. 14, line 6),

the broadcast data obtaining unit tries to obtain the piece of the substitutive broadcast data based on the substitutive identifier specified by the identifier specifier (see col. 13, lines 7-9), and

the reproducing unit reproduces, at the reproduction start time, one of the piece of the broadcast data and the piece of the substitutive broadcast data if successfully obtained (see col. 7, lines 55-67).

Zigmond et al. discloses the reproduction start time (see col. 7, lines 55-67).

Regarding **claim 15**, Briggs and Zigmond et al. discloses everything claimed as applied above (*see claim 14*). Briggs discloses the broadcast data transmission/reception system, wherein

the broadcast data obtaining unit includes (see fig 4A (STT 300-1)):
a recording medium (see col. 5, lines 66-col. 6, line 10);
a recording and judging subunit operable to record, on the recording medium, each piece of the substitutive broadcast data if successfully obtained (see col. 9, lines 45-52), and judge whether a piece of the substitutive broadcast data having a piece of the broadcast data is recorded on the recording medium (see col. 10, lines 4-10); and

a recording control unit operable to record the piece of the broadcast data on the recording medium only when a judgment result by the recording and judging subunit is negative (see col. 6, lines 11-27, col. 13, lines 49-col. 14, line 6), and

the reproducing unit reproduces, whichever of the piece of the broadcast data and the piece of the substitutive broadcast data is recorded on the recording medium (see col. 9, lines 25-52 and fig 4A).

Zigmond et al. discloses reproduction start time (see col. 7, lines 55-67).

Regarding **claim 16**, Briggs and Zigmond et al. discloses everything claimed as applied above (see *claim 15*). Briggs discloses the second receiver (see fig 4A (402)), wherein

each of the plural pieces of the broadcast data and the plural pieces of the substitutive broadcast data includes a plurality of data elements (see col. 13, lines 49-54, col. 13, lines 63-col. 14, lines 6 and fig 11 (1101 and 1103) respectively,

the broadcast data obtaining unit includes a judging subunit for judging whether the broadcast data (first type communication channel) or the substitutive broadcast data includes all the data elements, every time the broadcast data obtaining unit receives the broadcast data (first type communication channel) or the substitutive broadcast data (see col. 13, lines 49-54), and

the broadcast data obtaining unit obtains the broadcast data (first type communication channel) or the substitutive broadcast data only when a judgment result by the judging subunit is affirmative (see col. 13, lines 55-61).

Regarding **claim 18**, Briggs discloses a second receiver (see fig 4A (402)) that tries to obtain broadcast data (see col. 9, lines 45-52), a first receiver (see fig 4A (4014)) trying to obtain the broadcast data (see col. 9, lines 35-38), wherein

the broadcast data includes a plurality of data elements (see col. 13, lines 55-61),
the second receiver further receives substitutive broadcast data and a substitutive identifier which are transmitted one or more times at least a predetermined amount of time prior to a time when the broadcast data is transmitted, the substitutive broadcast data including a predetermined member among the data elements (see col. 13, lines 49-col. 14, line 43) and the substitutive identifier being for identifying the substitutive broadcast data (see col. 14, lines 26-33), and

the second receiver further includes (see fig 4A (402)):
a storing unit that stores data (see col. 9, lines 45-52 and fig 4A (330)),
substitutive identifier (second type of communication data) (see col. 13, line 64);
a broadcast data obtaining unit operable to try to obtain the substitutive broadcast data based on the substitutive identifier specified by the identifier specifier (see col. 13, lines 7-9); and

a reproducing unit operable to reproduce, only the broadcast data if successfully obtained, and reproduce the substitutive broadcast data in a case where the broadcast data obtaining unit has failed to obtain the broadcast data and succeeded in obtaining the substitutive broadcast data (see col. 13, lines 49-col. 14, line 6).

However, Briggs fails to specifically disclose transmitting broadcast data including time information indicating a reproduction start time.

Zigmond et al. discloses the transmitting broadcast data including time information indicating a reproduction start time (see col. 7, lines 55-67).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Briggs invention with the above mentioned limitation as taught by Zigmond et al. for the advantage of identifying when a program starts.

Regarding **claim 21**, Briggs discloses a transmitter (see fig 1 (200)), comprising: a first transmission unit (see fig 1 (200)) operable to transmit broadcast data (see col. 3, lines 28-31), both a first receiver (see fig 4A (401)) and a second receiver (see fig 4A (402)) trying to obtain the broadcast data (see col. 9, lines 35-38 and lines 45-47); and

the transmitter operable to transmit, at least a predetermined amount of time prior to a time when the first transmission unit transmits the broadcast data, substitutive broadcast data (broadcast data) and a substitutive identifier (second type of communication data) one or more times, the substitutive broadcast data including a same content as the broadcast data (see col. 13, lines 49-col. 14, line 42).

However, Briggs fails to specifically disclose a second transmission unit and transmitting broadcast data including time information indicating a reproduction start time.

Zigmond et al. discloses a second transmission unit (see fig 2 (207), col. 5, lines 10-22) and transmitting broadcast data including time information indicating a reproduction start time (see col. 7, lines 55-67).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Briggs invention with the above mentioned limitation as taught by Zigmond et al. for the advantage of identifying when a program starts.

Regarding **claim 23**, Briggs discloses a transmitter (see fig 1 (200)), comprising: a first transmission unit (see fig 1 (200)) operable to transmit broadcast data (see col. 3, lines 28-31), the broadcast data includes a plurality of data elements (see col. 13, lines 55-61), both a first receiver (see fig 4A (401)) and a second receiver (see fig 4A (402)) trying to obtain the broadcast data (see col. 9, lines 35-38 and lines 45-47), the transmitter operable to transmit, at least a predetermined amount of time prior to a time when the first transmission unit transmits the broadcast data, substitutive broadcast data (broadcast data) and a substitutive identifier (second type of communication data) one or more times (see col. 13, lines 49-col. 14, line 42), the substitutive broadcast data including a predetermined member among the data elements (see col. 14, lines 26-33), the substitutive identifier being for identifying the substitutive broadcast data (see col. 13, lines 49-col. 14, line 43), and only the second receiver (see fig 4A (402)) trying to obtain the broadcast data (see col. 9, lines 45-47).

However, Briggs fails to specifically disclose a second transmission unit and transmitting broadcast data including time information indicating a reproduction start time.

Zigmond et al. discloses a second transmission unit (see fig 2 (207), col. 5, lines 10-22) and transmitting broadcast data including time information indicating a reproduction start time (see col. 7, lines 55-67).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Briggs invention with the above mentioned limitation as taught by Zigmond et al. for the advantage of identifying when a program starts.

Regarding **claim 26**, Briggs discloses the broadcast data transmission/reception method used for a broadcast data transmission/reception system that includes a transmitter (see fig 1 (200)), a first receiver (see fig 4A (401)) and a second receiver (see fig 4A (402)), both the first (see fig 4A (401)) and second receivers (see fig 4A (402)) trying to obtain the broadcast data (see col. 9, lines 35-38 and lines 45-47), and the broadcast data transmission/reception method comprising steps of:

the transmitting, by the transmitter, substitutive broadcast data (broadcast data) and a substitutive identifier (second type of communication data) one or more times at least a predetermined amount of time prior to transmitting the broadcast data, the substitutive broadcast data including a same content as the broadcast data, and the

substitutive identifier being for identifying the substitutive broadcast data (see col. 13, lines 49-col. 14, line 42),

trying, by the second receiver that includes a storing unit (see fig 4A (402)) for storing therein an identifier specifier for specifying the substitutive identifier, to obtain the substitutive broadcast data (second type of communication data) based on the substitutive identifier specified by the identifier specifier (see col. 9, lines 59-62, col. 13, line 62-64); and

reproducing one of the broadcast data and the substitutive broadcast data if successfully obtained (see col. 9, lines 25-44).

However, Briggs fails to specifically disclose the transmitter transmitting broadcast data including time information indicating a reproduction start time.

Zigmond et al. discloses the transmitter transmitting broadcast data including time information indicating a reproduction start time (see col. 7, lines 55-67).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Briggs invention with the above mentioned limitation as taught by Zigmond et al. for the advantage of identifying when a program starts.

Regarding **claim 28**, Briggs discloses the broadcast data transmission/reception method used for a broadcast data transmission/reception system that includes a transmitter (see fig 1 (200)), a first receiver (see fig 4A (401)) and a second receiver (see fig 4A (402)), the broadcast data including a plurality of data elements (see col. 13,

lines 55-61), both the first (see fig 4A (401)) and second receivers (see fig 4A (402)) trying to obtain the broadcast data (see col. 9, lines 35-38 and lines 45-47), and the broadcast data transmission/reception method comprising steps of:

the transmitting, by the transmitter, substitutive broadcast data and a substitutive identifier one or more times at least a predetermined amount of time prior to transmitting the broadcast data, substitutive broadcast data being (see col. 13, lines 49-col. 14, line 43), the substitutive broadcast data including a predetermined member among the data elements (see col. 14, lines 26-33), and the substitutive identifier being for identifying the substitutive broadcast data (see col. 13, lines 49-col. 14, line 42),

trying, by the second receiver that includes a storing unit (see fig 4A (402)) for storing therein an identifier specifier for specifying the substitutive identifier, to obtain the substitutive broadcast data (second type of communication data) based on the substitutive identifier specified by the identifier specifier (see col. 9, lines 59-62, col. 13, line 62-64); and

reproducing, at the reproduction start time, only the broadcast data if successfully obtained, and reproducing, at the reproduction start time, the substitutive broadcast data only if the broadcast data has not been obtained and only the substitutive broadcast data has been obtained (see col. 13, lines 49-col. 14, line 6).

9. **Claims 9-10, 19-20 and 24-25** are rejected under 35 U.S.C. 103(a) as being unpatentable over Briggs (U.S. Patent No. 6,571,392) and Zigmond et al. (U.S. Patent

No. 6,571,392) as applied to *claims 8, 18 and 23* above, and further in view of Saunders et al. (U.S. Patent No 6,608,866).

Regarding **claims 9, 19 and 24**, Briggs and Zigmond et al. discloses everything claimed as applied above (see *claims 8, 18 and 23*). Briggs discloses the broadcast data (see fig 8, first type of communication channel) and substitute broadcast data (see fig 8, second type of communication channel).

However, Briggs and Zigmond et al. fail to specifically disclose GOP (Group of Picture) encoded by MPEG (Moving Picture Expert Group) and I-picture, which is a data element included in the GOP.

Saunders et al. discloses GOP (Group of Picture) encoded by MPEG (Moving Picture Expert Group) (see col. 2, lines 62-65 and fig 2) and I-picture, which is a data element included in the GOP (see col. 2, lines 66-col. 3, line 1 and fig 2).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Briggs and Zigmond et al.'s invention with the above mentioned limitation as taught by Saunders et al. for the advantage of providing better image quality.

Regarding **claims 10, 20 and 25**, Briggs and Zigmond et al. discloses everything claimed as applied above (see *claims 8, 18 and 23*). Briggs discloses the broadcast data (see fig 8, first type of communication channel) and substitute broadcast data (see fig 8, second type of communication channel).

However, Briggs and Zigmond et al. fail to specifically disclose GOP (Group of Picture) encoded by MPEG (Moving Picture Expert Group) and an I-picture and a P-picture, which is a data element included in the GOP.

Saunders et al. discloses GOP (Group of Picture) encoded by MPEG (Moving Picture Expert Group) (see col. 2, lines 62-65 and fig 2) and an I-picture and a P-picture, which is a data element included in the GOP (see col. 3, lines 12-20 and fig 2).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Briggs and Zigmond et al.'s invention with the above mentioned limitation as taught by Saunders et al. for the advantage of providing better image quality.

10. **Claims 7 and 17** are rejected under 35 U.S.C. 103(a) as being unpatentable over Briggs (U.S. Patent No. 7,219,367) in view of Walker et al. (U.S. Patent No. 6,263,505).

Regarding **claim 7**, Briggs discloses a broadcast data transmission/reception system that includes a transmitter (see fig 1 (200)), a first receiver (see fig 4A (401)) and a second receiver (see fig 4A (402)), and both the first and second receivers (401 and 402) trying to obtain the broadcast data (see col. 9, lines 31-52), wherein

the broadcast data (first type of data) is a piece of still images that constitute a moving picture (see fig 8 (803), data consists of numbers, words or images),

the second receiver further includes (see fig 4A (402)):

a storing unit that stores data (see col. 9, lines 45-52 and fig 4A (330)), substitutive identifier (second type of communication data) (see col. 13, line 64); a broadcast data obtaining unit operable to try to obtain the substitutive broadcast data based on the substitutive identifier specified by the identifier specifier (see col. 13, lines 7-9); and

the transmitter further transmits, at least a predetermined amount of time prior to transmitting the broadcast data, substitutive broadcast data (broadcast data) and a substitutive identifier (second type of communication data) one or more times, and the substitutive identifier being for identifying the substitutive broadcast data (see col. 13, lines 49-col. 14, line 42),

the substitutive broadcast data (see fig 8 (804), data consists of numbers, words or images) being a piece of still images that constitute the moving picture,

a reproducing unit operable to reproduce, the broadcast data (the first tuner produces the first type of communication data) if successfully obtained, and reproduce the substitutive broadcast data (the second tuner produces the second type of communication data) if successfully obtained (see col. 9, lines 25-44).

However, Briggs fail to specifically disclose time information indicating a second reproduction start time that is next to the first reproduction start time among the sequential reproduction start times.

Walker et al. discloses time information indicating a second reproduction start time that is next to the first reproduction start time among the sequential reproduction start times (see col. 9, lines 42-59).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Briggs invention with the above mentioned limitation as taught by Walker et al. in order to ensure receipt of the transmitted data.

Regarding **claim 17**, Briggs discloses a second receiver (see fig 4A (402)) that tries to obtain broadcast data (see col. 9, lines 45-52), a first receiver (see fig 4A (4014)) trying to obtain the broadcast data (see col. 9, lines 35-38), wherein

the broadcast data (first type of data) is a piece of still images that constitute a moving picture (see fig 8 (803), data consists of numbers, words or images),

the second receiver further receives substitutive broadcast data and a substitutive identifier which are transmitted one or more times at least a predetermined amount of time prior to a time when the broadcast data is transmitted (see col. 13, lines 62-col. 14, lines13),

the substitutive broadcast data (see fig 8 (804), data consists of numbers, words or images) being a piece of still images that constitute the moving picture,

the second receiver further includes (see fig 4A (402)):

a storing unit that stores data (see col. 9, lines 45-52 and fig 4A (330)), substitutive identifier (second type of communication data) (see col. 13, line 64);

a broadcast data obtaining unit operable to try to obtain the substitutive broadcast data based on the substitutive identifier specified by the identifier specifier (see col. 13, lines 7-9); and

a reproducing unit operable to reproduce, the broadcast data (the first tuner produces the first type of communication data) if successfully obtained, and reproduce the substitutive broadcast data (the second tuner produces the second type of communication data) if successfully obtained (see col. 9, lines 25-44).

However, Briggs fail to specifically disclose time information indicating a second reproduction start time that is next to the first reproduction start time among the sequential reproduction start times.

Walker et al. discloses time information indicating a second reproduction start time that is next to the first reproduction start time among the sequential reproduction start times (see col. 9, lines 42-59).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Briggs invention with the above mentioned limitation as taught by Walker et al. in order to ensure receipt of the transmitted data.

11. **Claims 22 and 27** are rejected under 35 U.S.C. 103(a) as being unpatentable over Briggs (U.S. Patent No. 7,219,367) in view of Zigmond et al. (U.S. Patent No. 6,571,392) and Walker et al. (U.S. Patent No. 6,263,505).

Regarding **claim 22**, Briggs discloses a transmitter (see fig 1 (200)), comprising: a first transmission unit (see fig 1 (200)) operable to transmit broadcast data (see col. 3, lines 28-31), the substitutive broadcast data (see fig 8 (803), data consists of numbers, words or images) being a piece of still images that constitute the moving

picture, both a first receiver (see fig 4A (401)) and a second receiver (see fig 4A (402)) trying to obtain the broadcast data (see col. 9, lines 35-38 and lines 45-47); and the transmitter operable to transmit, at least a predetermined amount of time prior to a time when the first transmission unit transmits the broadcast data, substitutive broadcast data (broadcast data) and a substitutive identifier (second type of communication data) one or more times (see col. 13, lines 49-col. 14, line 42), the substitutive identifier being for identifying the substitutive broadcast data, and only the second receiver trying to obtain the substitutive broadcast data and the substitutive identifier (see col. 13, lines 62-col. 14, lines 6).

However, Briggs fails to specifically disclose a second transmission unit and transmitting broadcast data including time information indicating a reproduction start time.

Zigmond et al. discloses a second transmission unit (see fig 2 (207), col. 5, lines 10-22) and transmitting broadcast data including time information indicating a reproduction start time (see col. 7, lines 55-67).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Briggs invention with the above mentioned limitation as taught by Zigmond et al. for the advantage of identifying when a program starts.

However, Briggs and Zigmond et al. fail to specifically disclose time information indicating a second reproduction start time that is next to the first reproduction start time among the sequential reproduction start times.

Walker et al. discloses time information indicating a second reproduction start time that is next to the first reproduction start time among the sequential reproduction start times (see col. 9, lines 42-59).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Briggs and Zigmond et al.'s invention with the above mentioned limitation as taught by Walker et al. in order to ensure receipt of the transmitted data.

Regarding **claim 27**, Briggs discloses a broadcast data transmission/reception method used for a broadcast data transmission/reception system that includes a transmitter (see fig 1 (200)), a first receiver (see fig 4A (401)) and a second receiver (see fig 4A (402)), the substitutive broadcast data (see fig 8 (804), data consists of numbers, words or images) being a piece of still images that constitute the moving picture, both the first (see fig 4A (401)) and second receivers (see fig 4A (402)) trying to obtain the broadcast data (see col. 9, lines 35-38 and lines 45-47), and the broadcast data transmission/reception method comprising steps of:

transmitting, by the transmitter, substitutive broadcast data (broadcast data) and a substitutive identifier (second type of communication data) one or more times at least a predetermined amount of time prior to transmitting the broadcast data, and the substitutive identifier being for identifying the substitutive broadcast data (see col. 13, lines 49-col. 14, line 42),

the substitutive broadcast data (see fig 8 (804), data consists of numbers, words or images) being a piece of still images that constitute the moving picture, trying, by the second receiver that includes a storing unit (see fig 4A (402)) for storing therein an identifier specifier for specifying the substitutive identifier, to obtain the substitutive broadcast data (second type of communication data) based on the substitutive identifier specified by the identifier specifier (see col. 9, lines 59-62, col. 13, line 62-64); and

a reproducing unit operable to reproduce, the broadcast data (the first tuner produces the first type of communication data) if successfully obtained, and reproduce the substitutive broadcast data (the second tuner produces the second type of communication data) if successfully obtained (see col. 9, lines 25-44).

However, Briggs fails to specifically disclose the transmitter transmitting broadcast data including time information indicating a reproduction start time.

Zigmund et al. discloses the transmitter transmitting broadcast data including time information indicating a reproduction start time (see col. 7, lines 55-67).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Briggs invention with the above mentioned limitation as taught by Zigmund et al. for the advantage of identifying when a program starts.

However, Briggs and Zigmund et al. fail to specifically disclose time information indicating a second reproduction start time that is next to the first reproduction start time among the sequential reproduction start times.

Walker et al. discloses time information indicating a second reproduction start time that is next to the first reproduction start time among the sequential reproduction start times (see col. 9, lines 42-59).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Briggs and Zigmond et al.'s invention with the above mentioned limitation as taught by Walker et al. in order to ensure receipt of the transmitted data.

Citation of Pertinent Prior Art

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Carr (U.S. Patent No. 6,574,795) discloses processing received data to determine if a portion of the expected data is missing, if so, generating a supplemental data.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nnenna N. Ekpo whose telephone number is 571-270-1663. The examiner can normally be reached on Monday - Friday 7:30 AM-5:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Pendleton can be reached on 571-272-7527. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NNE/nne
March 10, 2008.
/Brian T. Pendleton/
Supervisory Patent Examiner, Art Unit 2623